

## CLAIMS

1. A method of detecting texture sharing between multiple contexts having unique context ID's:

obtaining a texture usage mask of a subject texture;

obtaining an inverted context ID of a subject context;

ANDing the texture usage mask of the subject texture with the inverted context ID of the subject context to produce a resultant value; and

detecting that the subject texture is not being shared by another context with the subject context upon the resultant value being equal to 0 and detecting that the subject texture is being shared by another context with the subject context upon the resultant value not being equal to 0.

2. The method of claim 1, further comprising:

revising the texture usage mask of a subject texture prior to the subject texture being used by another context by bitwise ORing the texture usage mask with a context ID of the another context to produce a resultant new texture usage mask for the subject texture.

3. The method of claim 1, further comprising:

revising the texture usage mask of a subject texture upon the subject texture no longer being used by a particular context by deleting a context ID of the particular context from the texture usage mask to produce a resultant new texture usage mask for the subject texture.

1 4. The method of claim 2, further comprising:  
2 revising the texture usage mask of a subject texture upon the subject texture no  
3 longer being used by a particular context by deleting a context ID of the particular context  
4 from the texture usage mask to produce a resultant new texture usage mask for the subject  
5 texture.

1 5. A method of detecting texture sharing between multiple contexts having unique  
2 context ID's:

3 obtaining a texture usage mask of a subject texture;  
4 obtaining a context ID of a subject context;  
5 performing a first logic operation with the texture usage mask of the subject  
6 texture and the context ID of the subject context to produce a resultant value; and

7 detecting that the subject texture is not being shared by another context with the  
8 subject context upon the resultant value being equal to a first predetermined value and detecting  
9 that the subject texture is being shared by another context upon the resultant value being equal  
10 to a second predetermined value which is different from the first predetermined value.

1 6. The method of claim 5, further comprising:  
2 revising the texture usage mask of a subject texture prior to the subject texture  
3 being used by another context by performing a second logic operation with the texture usage  
4 mask and a context ID of the another context to produce a resultant new texture usage mask  
5 for the subject texture.

1 7. The method of claim 5, further comprising:

2 revising the texture usage mask of a subject texture upon the subject texture no  
3 longer being used by a particular context by performing a third logic operation with the texture  
4 usage mask and a context ID of the particular context to produce a resultant new texture usage  
5 mask for the subject texture.

1 **8. The method of claim 7, further comprising:**

2 revising the texture usage mask of a subject texture upon the subject texture no  
3 longer being used by a particular context by performing a third logic operation with the texture  
4 usage mask and a context ID of the particular context to produce a resultant new texture usage  
5 mask for the subject texture.

1 **9. A program storage device readable by a machine, tangibly embodying a**  
2 **program of instructions executable by the machine to perform a method of detecting texture**  
3 **sharing between multiple contexts having unique context ID's, the method comprising:**

4 obtaining a texture usage mask of a subject texture;

5 obtaining an inverted context ID of a subject context;

6 ANDing the texture usage mask of the subject texture with the inverted context  
7 ID of the subject context to produce a resultant value; and

8 detecting that the subject texture is not being shared by another context with the  
9 subject context upon the resultant value being equal to 0 and detecting that the subject texture  
10 is being shared by another context with the subject context upon the resultant value not being  
11 equal to 0.

1           10.   The program storage device of claim 9, the method further comprising:  
2                revising the texture usage mask of a subject texture prior to the subject texture  
3           being used by another context by bitwise ORing the texture usage mask with a context ID of  
4           the another context to produce a resultant new texture usage mask for the subject texture.

1           11.   The program storage device of claim 9, the method further comprising:  
2                revising the texture usage mask of a subject texture upon the subject texture no  
3           longer being used by a particular context by deleting a context ID of the particular context  
4           from the texture usage mask to produce a resultant new texture usage mask for the subject  
5           texture.

1           12.   The program storage device of claim 11, the method further comprising:  
2                revising the texture usage mask of a subject texture upon the subject texture no  
3           longer being used by a particular context by deleting a context ID of the particular context  
4           from the texture usage mask to produce a resultant new texture usage mask for the subject  
5           texture.

1           13.   A program storage device readable by a machine, tangibly embodying a  
2           program of instructions executable by the machine to perform a method of detecting texture  
3           sharing between multiple contexts having unique context ID's, the method comprising:  
4                obtaining a texture usage mask of a subject texture;  
5                obtaining a context ID of a subject context;

6 performing a first logic operation with the texture usage mask of the subject  
7 texture and the context ID of the subject context to produce a resultant value; and  
8 detecting that the subject texture is not being shared by another context with the  
9 subject context upon the resultant value being equal to a first predetermined value and detecting  
10 that the subject texture is being shared by another context upon the resultant value being equal  
11 to a second predetermined value which is different from the first predetermined value.

1 14. The program storage device of claim 13, the method further comprising:  
2 revising the texture usage mask of a subject texture prior to the subject texture  
3 being used by another context by performing a second logic operation with the texture usage  
4 mask and a context ID of the another context to produce a resultant new texture usage mask  
5 for the subject texture.

1 15. The program storage device of claim 13, the method further comprising:  
2 revising the texture usage mask of a subject texture upon the subject texture no  
3 longer being used by a particular context by performing a third logic operation with the texture  
4 usage mask and a context ID of the particular context to produce a resultant new texture usage  
5 mask for the subject texture.

1 16. The program storage device of claim 15, the method further comprising:  
2 revising the texture usage mask of a subject texture upon the subject texture no  
3 longer being used by a particular context by performing a third logic operation with the texture  
4 usage mask and a context ID of the particular context to produce a resultant new texture usage  
5 mask for the subject texture.